IN THE CLAIMS

Please cancel Claims 1 to 8 and 12 in favor of the following new Claims 13-24:

--13. (Newly Added) A method of manufacturing a single crystal of silicon carbide, comprising:

forming a single crystal of silicon carbide on a substrate surface at a temperature of not less than 900° C from an atmosphere containing a silicon carbide feedstock gas comprising at least a silicon source gas and a carbon source gas under the atmospheric condition of the partial pressure (ps) of the silicon source gas being held constant (at ps>0) and the partial pressure of the carbon source gas in the atmosphere repeatedly alternating between state pc1 present at an interval of time (tc1) and the state pc2 present at an interval of time (tc2) until the single crystal of silicon carbide is completely formed, where pc1>pc2 such that the partial pressure ratio (pc1/ps) falls within the range of 1-10 times the attachment coefficient ratio (Ss/Sc) and the partial pressure ratio (pc2/ps) falls within the range of less than once the attachment coefficient ratio (Ss/Sc), wherein Ss denotes the attachment coefficient of silicon source gas to the silicon carbide substrate at the substrate temperature during formation of said silicon carbide and Sc denotes the attachment coefficient of carbon source gas to the silicon carbide substrate at the substrate temperature during the formation of said single crystal of silicon carbide.

14. (New) The method of manufacture according to Claim 13, wherein the silicon carbide is at least one member selected from the group consisting of SiH_4, Si_2H_6, $SiCl_4$, $SiHCl_3$, SiH_2Cl_2, $Si(CH_3)_4$, $SiH_2(CH_3)_2$, $SiH(CH_3)_3$ and $Si_2(CH_3)_6$ and said carbon source gas is at least one member selected from the group consisting of CH_4, C_3H_8, C_2H_2, C_2H_6, C_2H_4,C_3H_6, CCl_4, CHF_3 and CF_4.

15. (New) The method of manufacture according to Claim 13, wherein pc2 is essentially zero, the time interval(tc1) during which the partial pressure of the carbon source gas is set to pc1 is 0.1-30 seconds, and the time interval(tc2) during which the partial pressure of the carbon

source gas is set to pc2 is 0.1-30 seconds.

16. (New) A method of manufacturing silicon carbide, comprising:

forming a seed crystal of silicon carbide by the method of Claim 13; and

depositing silicon carbide on said seed crystal by vapor phase epitaxy, sublimation recrystallization or liquid deposition.

17. (New) The method of manufacture according to Claim 16, wherein silicon carbide blocks of 4-6 inch bore are formed by vapor phase epitaxy, sublimation recrystallization or liquid deposition.

18. (New) A method of manufacturing composite materials, comprising:

forming a seed crystal of silicon carbide by the method of Claim 13; and

forming diamond and/or a gallium nitride structure on the seed crystal.

19. (New) A method of manufacturing a single crystal of silicon carbide, comprising:

forming a single crystal of silicon carbide on a substrate surface at a temperature of not less than 900° C from an atmosphere containing a silicon carbide feedstock gas comprising at least a silicon source gas and a carbon source gas under the atmospheric condition of the partial pressure (pc) of the carbon source gas being held constant (at pc>0) and the partial pressure of the silicon source gas in the atmosphere repeatedly alternating between state ps1 present at an interval of time (ts1) and the state ps2 present at an interval of time (ts2) until the single crystal of silicon carbide is completely formed, where ps1<ps2 such that the partial pressure ratio (pc/ps1) falls within the range of 1-10 times the attachment coefficient ratio (Ss/Sc) and the partial pressure ratio (pc/ps2) falls within the range of less than once the attachment coefficient ratio (Ss/Sc), wherein Ss denotes the attachment coefficient of silicon source gas to the silicon carbide substrate at the substrate temperature during formation of said silicon carbide and Sc denotes the attachment coefficient of carbon source gas to the silicon carbide substrate at the

substrate temperature during the formation of said single crystal of silicon carbide.

20. (New) The method of manufacture according to Claim 19, wherein the silicon carbide is at least one member selected from the group consisting of SiH_4, Si_2H_6, $SiCl_4$, $SiHCl_3$, SiH_2Cl_2, $Si(CH_3)_4$, $SiH_2(CH_3)_2$, $SiH(CH_3)_3$ and $Si_2(CH_3)_6$ and said carbon source gas is at least one member selected from the group consisting of CH_4, C_3H_8, C_2H_2, C_2H_6, C_2H_4, C_3H_6, CCl_4, CHF_3 and CF_4.

21. (New) The method of manufacture according to Claim 19, wherein ps1 is essentially zero, the time interval(ts1) during which the partial pressure of the silicon source gas is set to ps1 is 0.1-60 seconds, and the time interval(ts2) during which the partial pressure of the carbon source gas is set to ps2 is 0.1-60 seconds.

22. (New) A method of manufacturing silicon carbide, comprising:

forming a seed crystal of silicon carbide by the method of Claim 19; and

depositing silicon carbide on said seed crystal by vapor phase epitaxy, sublimation recrystallization or liquid deposition.

23. (New) The method of manufacture according to Claim 22, wherein silicon carbide blocks of 4-6 inch bore are formed by vapor phase epitaxy, sublimation recrystallization or liquid deposition.

24. (New) A method of manufacturing composite materials, comprising:

forming a seed crystal of silicon carbide by the method of Claim 19; and

forming diamond and/or a gallium nitride structure on the seed crystal.--

REMARKS

Claims 1-8 and 12 have been canceled in favor of new Claims 13-24. Claims 9-11 are withdrawn from consideration. Reconsideration is respectfully requested.